

5E0301 - further research Required RCRA listing High - EHW 7/26/88

EPA			POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT PART 1 - SITE INFORMATION AND ASSESSMENT			I. IDENTIFICATION		
II. SITE NAME AND LOCATION			01 SITE NAME (Legal, common, or descriptive name of site)				02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER	
Rexnord Inc., Rockford Products Plt#3			707 HARRISON Avenue				03 CITY	
Rockford			04 STATE		05 ZIP CODE	06 COUNTY	07 COUNTY CODE	
IL			61108-7197		Winnebago	201	16	
09 COORDINATES			LATITUDE		LONGITUDE			
42 14 05.0			089		0500.			
10 DIRECTIONS TO SITE (Starting from nearest public road)			RECEIVED MAY 20 1988					
III. RESPONSIBLE PARTIES			Pre Remedial					
01 OWNER (if known)			02 STREET (Business, mailing, residential)					
Rexnord			350 N. Sunny Slope					
03 CITY			04 STATE		05 ZIP CODE	06 TELEPHONE NUMBER		
Brookfield			Wi		53005	414 797-6900		
07 OPERATOR (if known and different from owner)			08 STREET (Business, mailing, residential)					
Rockford Products			707 HARRISON Avenue					
09 CITY			10 STATE		11 ZIP CODE	12 TELEPHONE NUMBER		
Rockford			IL		61108-7197	815 397-6000		
13 TYPE OF OWNERSHIP (Check one)			<input checked="" type="checkbox"/> A. PRIVATE <input type="checkbox"/> B. FEDERAL: (Agency name) <input type="checkbox"/> C. STATE <input type="checkbox"/> D. COUNTY <input type="checkbox"/> E. MUNICIPAL <input type="checkbox"/> F. OTHER: (Specify) <input type="checkbox"/> G. UNKNOWN					
14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)			<input type="checkbox"/> A. RCRA 3001 DATE RECEIVED: MONTH DAY YEAR <input type="checkbox"/> B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: MONTH DAY YEAR <input checked="" type="checkbox"/> C. NONE					
IV. CHARACTERIZATION OF POTENTIAL HAZARD			01 ON SITE INSPECTION					
<input checked="" type="checkbox"/> YES DATE MONTH DAY YEAR			BY (Check all that apply) <input type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA CONTRACTOR <input checked="" type="checkbox"/> C. STATE <input type="checkbox"/> D. OTHER CONTRACTOR <input type="checkbox"/> E. LOCAL HEALTH OFFICIAL <input type="checkbox"/> F. OTHER: (Specify)					
<input type="checkbox"/> NO			CONTRACTOR NAME(S):					
02 SITE STATUS (Check one)			03 YEARS OF OPERATION					
<input checked="" type="checkbox"/> A. ACTIVE <input type="checkbox"/> B. INACTIVE <input type="checkbox"/> C. UNKNOWN			1974 Present <input type="checkbox"/> UNKNOWN					
04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED			Solvents (Persistent, Toxic) Organics (Soluble) Inorganics					
05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION			Groundwater (population, Environment) Surface Water (Environment)					
V. PRIORITY ASSESSMENT			01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)					
<input checked="" type="checkbox"/> A. HIGH (inspection required promptly) <input type="checkbox"/> B. MEDIUM (inspection required) <input type="checkbox"/> C. LOW (inspect on time available basis) <input type="checkbox"/> D. NONE (No further action needed, complete current disposition form)								
VI. INFORMATION AVAILABLE FROM			01 CONTACT					
Larry Hammond			02 OF (Agency/Organization)		03 TELEPHONE NUMBER			
Rockford Products Plt#3			1815 397-6000					
04 PERSON RESPONSIBLE FOR ASSESSMENT			05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE		
JOHN W. Morgan			IEPA	RPMS	787 782-1803	MONTH DAY YEAR		

EPA FORM 2070-12 (7-81)

EPA Region 5 Records Ctr.



393564



I HIGHLY VOLATILE
J EXPLOSIVE
K REACTIVE
L INCOMPATIBLE
M NOT APPLICABLE

EPA FORM 2070-12 (7-81)



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
ILD 005212097

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION 02 ☒ OBSERVED (DATE 12/10/85) POTENTIAL ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 150,000 04 NARRATIVE DESCRIPTION
A groundwater monitoring program at R.P.3 detected eleven organic volatiles, but only five on a re-occurring basis. These include 1,1,1-trichloroethane, 1,1-dichloroethane, 1,1-dichloroethane, trichloroethylene, and tri 1,2, -dichloroethane. The most significant level detected was 452 ppb. of trichloroethylene.

01 ☒ B. SURFACE WATER CONTAMINATION 02 ☐ OBSERVED (DATE:) ☒ POTENTIAL ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 04 NARRATIVE DESCRIPTION
R.P.3 is located about mile east of the Rock River in Rockford. The natural groundwater flow in the vicinity is westward toward the Rock River. Therefore, any contaminated groundwater discharging into the River could have an adverse effect on surface water Quality.

01 ☒ C. CONTAMINATION OF AIR 02 ☐ OBSERVED (DATE:) POTENTIAL ☒ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 04 NARRATIVE DESCRIPTION
On November 16, 1984, Rockford Prod. PL#3 received a letter from IEPA stating that they were emitting 200 tons of 1,1,1-trichloroethane into the air, 10 times the permitted level.

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS 02 ☐ OBSERVED (DATE:) POTENTIAL ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 04 NARRATIVE DESCRIPTION
unknown

01 ☐ E. DIRECT CONTACT 02 ☐ OBSERVED (DATE:) POTENTIAL ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 04 NARRATIVE DESCRIPTION
unknown

01 ☒ F. CONTAMINATION OF SOIL 02 ☒ OBSERVED (DATE: 1/10/84) POTENTIAL ALLEGED
03 AREA POTENTIALLY AFFECTED: (ACRES) 04 NARRATIVE DESCRIPTION
On 1/10/84 IEPA personnel collected a soil sample (S101) around the perimeter of a roll off Box which was used to collect sludges prior to disposal. S101 yielded 6.3 ppm cyanide and 26.2 ppm cadmium.

01 ☒ G. DRINKING WATER CONTAMINATION 02 ☐ OBSERVED (DATE:) POTENTIAL ☒ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 04 NARRATIVE DESCRIPTION
Rockford relies on groundwater from the underlying aquifers as the primary source of public drinking water. Six public wells in the vicinity reported contaminants similar to those reported at R.P.3.

01 ☐ H. WORKER EXPOSURE/INJURY 02 ☐ OBSERVED (DATE:) POTENTIAL ALLEGED
03 WORKERS POTENTIALLY AFFECTED: 04 NARRATIVE DESCRIPTION
unknown

01 ☐ I. POPULATION EXPOSURE/INJURY 02 ☐ OBSERVED (DATE:) POTENTIAL ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 04 NARRATIVE DESCRIPTION
unknown



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
ILL 005212097

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

unknown

01 ☐ K. DAMAGE TO FAUNA
04 NARRATIVE DESCRIPTION (include name(s) of species)

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

unknown

01 ☐ L. CONTAMINATION OF FOOD CHAIN
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

unknown

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES
(Spills, runoff, standing liquids, leaking drums)
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

unknown

01 ☐ N. DAMAGE TO OFFSITE PROPERTY
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

unknown

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

unknown

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING
04 NARRATIVE DESCRIPTION

02 ☒ OBSERVED (DATE: 2/3/86)

☐ POTENTIAL

☐ ALLEGED

On February 5, 1986, approximately 50 to 100 gallons of 1,1,1-Trichloroethane was spilled on site. It reportedly drained into the seepage pit and a ditch.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

R.P.3 has an abandoned landfill on-site which reportedly accepted a cyanide sludge from 1970-1975, and a seepage pit which contained organic contamination. (70 p.p.b - 213 p.p.b V.O.C's)

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

On April 1, 1988, an off-site reconnaissance inspection was conducted to inspect site security, accessibility, the surrounding habitat and to update site conditions and operational status. (see Executive Summary)

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Groundwater Monitoring Report (IEPA/DLPC) by Rapps + Associates - Section II, part A, B, G
U.S.G.S. Topographic map - Section II, part B
IEPA/DLPC + DAPC files - Section II, part C, F, P
IEPA/DL

LPC #2010300031 -- Winnebago County
Rexnord, Inc., Rockford Products Plant No. 3
ILD005212097

April 27, 1988

EXECUTIVE SUMMARY

Rexnord, Inc., Rockford Products Plant No. 3 (R.P. 3), which has been in operation since 1954, is a manufacturer of metal fasteners. R.P. 3 is located about one mile east of the Rock River in a heavily industrialized southeast part of Rockford at 707 Harrison Avenue. R.P. 3 applied for their Part A on November 13, 1980 and has currently submitted their closure plan (191) to the IEPA.

The manufacturing process at R.P. 3 generates the following listed hazardous wastes: F001, F002, F007, F008, F009, F010, F011, F012, F017, F018, D001, D002, D003, D007, P029, P030, P055, P074, P106, P121, U122, U220, and U228. In addition, this facility operates the following RCRA units: S01 (two drum storage areas), S02 (tank storage), and T03 (hazardous waste incinerator).

Additional waste management activity at R.P. 3 includes a non-hazardous waste incinerator, a wastewater treatment unit (No. 1980-EE-2496), waste oil storage in containers and underground tanks, an on-site abandoned landfill, and a seepage pit (No. 1984-E0-0221) permitted to receive non-contact cooling water and storm water runoff from building roofs, parking lots, and adjacent residential property.

The abandoned landfill is located on the southern portion of R.P. 3 property just adjacent to the seepage pit. The landfill dimensions are approximately 100' in length by 35' wide, with a depth ranging from 11' to 12'. The landfill was active from 1968-1978. It accepted machinery parts, approximately 2695 cu. ft. of wheelabrator grit and incinerator baghouse dust, and approximately 313,600 gallons of soluble oil. In addition to this waste, Larry Hammond, a representative for R.P. 3, on November 21, 1983, mentioned to IEPA personnel that a small amount of hazardous waste may have been disposed of in error at this site prior to RCRA regulations. On July 13, 1987, an employee of R.P. 3 visited the Rockford Regional IEPA Office to report that from 1970-1975 he was personally involved in a routine dumping of a cyanide sludge which was buried on-site. R.P. 3 claims that during 1978, a clean-up of all obtainable drums was undertaken and removed from the site.

The seepage pit is permitted by the Division of Water Pollution Control/IEPA and authorizes R.P. 3 to discharge approximately 36,000 gpd of non-contact cooling water from their metal finishing operation and storm water runoff from building roofs, parking lots and adjacent residential property into the pit. The main body of the seepage pit

consumes a surface area of approximately one acre and a maximum depth of 11', and is designed to discharge into the underlying soil (sand and gravel). Although the permit only allows the discharge of non-hazardous wastewater into the pit, on November 28, 1984, IEPA personnel collected water samples which revealed the presence of volatile organic contamination. Sample S101 yielded 66 ppb of 1,1,1-trichloroethane, 66 ppb trichloroethylene, and 6 ppb tetrachloroethylene. Two additional samples (S012, S501) detected similar results with less concentrations. Additional non-permitted activity at the seepage pit consisted of discharging waste oil into the pit. R.P. 3 claims this practice was discontinued as of August 1984. On April 15, 1986, during a site visit by IEPA personnel, a white liquid was observed entering the pit via cement pipe originating inside the plant. Phil Carnock, a R.P. 3 employee, identified the source as a non-hazardous slurry sludge from the deburring machine. Between 1982-1984, R.P. 3 claims they began a clean-up of the pit, removing all the material and hauling it away. Some of the material went to a landfill, while a great amount of ash and contaminated sand and soil went across the street to fill a foundation under a new building. The clean-up was mostly completed before the Division of Water Pollution Control/IEPA became aware of the pit.

Based on the preceding water analysis of the seepage pit, IEPA felt the seepage pit should be treated as a hazardous waste disposal lagoon subject to RCRA regulations. But further investigation revealed the potential source was four 1,1,1-trichloroethane vapor degreasers (81040047) permitted by the Division of Air Pollution Control/IEPA. This permit allows R.P. 3 to emit 20 tons of vaporous 1,1,1-trichloroethane into the atmosphere. On November 16, 1984, R.P. 3 received a letter from IEPA stating that they were emitting 200 tons of 1,1,1-TCA into the air, 10 times the permitted level. R.P. 3 claims that the 1,1,1-TCA vapor when emitted into the atmosphere immediately condenses and falls into the roof in a liquid state. Then, through precipitation runoff, it is eventually washed into the seepage pit. Based on this theory, R.P. 3 argues that RCRA does not regulate non-containerized gases and roof precipitation runoff as hazardous waste.

Additional environmental concern is the impact the seepage pit is having on the groundwater. The seepage pit permit required R.P. 3 to install three shallow groundwater monitoring wells around the perimeter of the pit. A total of eleven organic volatiles were detected in the groundwater. However, only five of these chemicals were reported on a recurring basis. The five volatiles include 1,1,1-trichloroethane (TCA), 1,1-dichloroethane (1,1-DCA), 1,1-dichloroethene (1,1-DCE), trichloroethylene (TCE), and tr-1,2-dichloroethene (1,2-DCE). Of these five, the most significant concentrations were detected as follows: December 10, 1985, 199 ppb of TCA was detected in well 2 and 452 ppb of TCE was detected in well 3. January 1, 1987, 200 ppb of TCA was detected in the plant's production well inside the plant. See the attached chemical analysis for additional information.

Based on the discovery of organic contamination in both the seepage pit and groundwater, the IEPA requested that R.P. 3 submit and implement a more extensive groundwater monitoring plan. This included the installation of eight additional shallow monitoring wells. In addition to the groundwater plan, R.P. 3 also submitted a roof storm water plan to minimize contaminants entering the seepage pit.

Including the four TCA degreasers, an additional potential source of the groundwater contamination includes a spill which occurred on February 5, 1986. Approximately 50 to 100 gallons of TCA was spilled on the roof during a filling operation of a storage tank. Phil Carnock, Plant Manager, reported to the IEPA that the TCA would eventually drain into the seepage pit and an open ditch on the west side of the plant. R.P. 3 also has an underground waste oil storage tank with concentrations of TCA ranging from 10 to 250 ppm.

The groundwater contamination at this site is a major concern because the City of Rockford relies on the underlying aquifers as the primary source of public drinking water. R.P. 3 is situated above an outwash filled bedrock valley in a highly permeable soil. The glacial outwash consists principally of sand and gravel deposits which serve as a major aquifer. Beneath this aquifer underlies the Galena-Platteville Dolomite, followed by the Glenwood and St. Peter Sandstones, all of the Ordovician system. Each of these members are hydraulically interconnected and serve as regional or local aquifers. Therefore, any groundwater contamination at this site presents a substantial threat to the public water supply of Rockford.

On April 1, 1988, an off-site reconnaissance inspection was conducted to inspect site security, accessibility, the surrounding habitat, and to update site conditions and operational status. The site appeared to be operational at the time of the inspection. Plant security consists of a well-constructed fence around the perimeter of the property, a guard house, and a security vehicle. The seepage pit was visible from the property boundary and appeared to contain a liquid which resembled water. The abandoned landfill was south of the pit and was not as readily visible. The Rock River is about one mile east, and the area surrounding the site is heavily industrialized with small residential areas. The site has currently applied for closure under interim status.

R.P. 3 has been assigned a high priority for a site inspection. This decision is based on the high HRS score, which is a result of the large population affected should the primary source of public drinking water be contaminated.

JWM:tk:4/29/17-2

Attachment